# LAUREN L. SCHMITZ

Robert M. La Follette School of Public Affairs 1180 Observatory Drive, Madison, WI 53706 <u>llschmitz@wisc.edu</u>

## PROFESSIONAL APPOINTMENTS

2019-	Assistant Professor of Public Affairs	
	Robert M. La Follette School of Public Affairs University of Wisconsin-Madison	
2017-19	NIA (K99) Postdoctoral Research Fellow Survey Research Center (SRC) and Health and Retirement Study (HRS) Institute for Social Research, University of Michigan, Ann Arbor	
2015-17	NIA (T32) Postdoctoral Research Fellow Population Studies Center (PSC) and Health and Retirement Study (HRS) Institute for Social Research, University of Michigan, Ann Arbor	
EDUCATION		
2019	M.S., Human Genetics, University of Michigan	
2015	Ph.D., Economics, New School for Social Research	
2012	M.S., Economics, New School for Social Research	
2008	<b>B.A.</b> , Economics, University of Colorado, magna cum laude	
PROFESSIONAL AFFILIATIONS		
2023-	<b>Research Director for Health and Biodemography</b> , Center for Demography of Health and Aging (CDHA), UW-Madison	
2023-	Faculty Affiliate, Institute for Diversity Science (IDS), UW-Madison	
2020-	Faculty Affiliate, Holtz Center for Science and Technology Studies, UW-Madison	
2020-	Faculty Affiliate, Population Health Sciences, UW-Madison	
2020-	Faculty Affiliate, Institute for Research on Poverty (IRP), UW-Madison	
2019-	Faculty Affiliate, Center for Demography of Health and Aging (CDHA), UW-Madison	
2019-	Faculty Affiliate, Center for Demography and Ecology, UW-Madison	
2019-	Adjunct Research Assistant Professor, Health and Retirement Study and Survey Research Center, Institute for Social Research, University of Michigan	
2019-	<b>Senior Fellow</b> , Schwartz Center for Economic Policy Analysis, The New School for Social Research	
2019-20	Research Economist, National Bureau for Economic Research (NBER)	

#### **RESEARCH INTERESTS**

*Primary fields*: social genomics, health economics, population health and aging, economics of aging, biodemography, social determinants of health and health disparities

## **PUBLICATIONS**

\*Denotes corresponding author; \*denotes equal contribution; \*denotes mentored student/postdoc

## **Refereed Journal Articles**

- 1. Opsasnick LA\*, SM Ratliff, JD Faul, **LL Schmitz**, W Zhao, JA Smith. Epigenome-wide association study of long-term psychosocial stress in older adults. *Epigenetics*. In press.
- 2. Noghanibehambari H\*, JM Fletcher, **LL Schmitz**, V Duque, V Gawai<sup>#</sup>. (2024). Early-life economic conditions and old-age mortality: Evidence from historical county-level bank deposit data. *Journal of Population Economics*. In press.
- 3. Choi JJ<sup>#</sup>, RL Koscik, EM Jonaitis, DJ Panyard, AR Morrow, SC Johnson, CD Engelman\*, **LL Schmitz**. (2023). Assessing the Biological Mechanisms Linking Smoking Behavior and Cognitive Function: A Mediation Analysis of Untargeted Metabolomics. *Metabolites*, 13, 1154.
- 4. Duque V and **LL Schmitz\*.** (2023). The influence of early-life economic shocks on long-term outcomes: Evidence from the U.S. Great Depression. *Journal of Human Resources*. Published online before print. https://doi.org/10.3368/jhr.0421-11584R1.
  - Profiled by The Center for Retirement Research
- 5. **Schmitz LL\***, S Merkin, W Zhao, S Ratliff, Y Liu, J Ding, JA Smith, T Seeman. (2023). Early life adversity associations with later life epigenetic profiles: The Multi-Ethnic Study of Atherosclerosis (MESA). *American Journal of Epidemiology*. 119(12): 1991-2005.
  - Profiled by The Cap Times and Wisconsin Public Radio
- 6. **Schmitz LL\*** and V Duque. (2022). In utero exposure to the Great Depression is reflected in latelife epigenetic aging signatures. *PNAS*. 119(46), e2208530119.
  - Profiled by Nature, Fortune, BBC News Health Check
- 7. Miao J<sup>#</sup>, Y Lin, Y Wu, B Zheng, **LL Schmitz**, JM Fletcher, Q Lu\*. (2022). A quantile integral linear model to quantify genetic effects on phenotypic variability. *PNAS*. 119(39), e2212959119.
- 8. Fiorito G\*, S Pedron, CO Rosales, C McCrory....**Schmitz LL**....Lifepath consortium, P Vineis, C Carmeli. (2022). The role of epigenetic clocks in explaining educational inequalities in mortality: a multi-cohort study and meta-analysis. *The Journals of Gerontology, Series A: Biological Sciences and Medical Sciences*. Feb 17:glac041.
- 9. **Schmitz LL\***, W Zhao, SM Ratliff, J Goodwin<sup>#</sup>, J Miao<sup>#</sup>, Q Lu, Y Liu, M Levine, JA Smith. (2021). The socioeconomic gradient in epigenetic ageing clocks: Evidence from the Multi-ethnic Study of Atherosclerosis and the Health and Retirement Study. *Epigenetics*. Jul 6;1-23.

- 10. **Schmitz LL\***, J Goodwin<sup>#</sup>, J Miao<sup>#</sup>, Q Lu, D Conley. (2021). The impact of late-career job loss and genetic risk on body mass index: Evidence from variance polygenic scores. *Scientific Reports*. 11:7647. NBER Working Paper #22348.
- 11. Gard AM\*, EB Ware, LW Hyde, **LL Schmitz**, J Faul, CM Mitchell. (2021). Phenotypic and genetic markers of psychopathology in a population-based sample of older adults. *Translational Psychiatry*, 11:239.
- 12. Liu Z, D Leung, K Thrush, S Ratliff, W Zhao, T Toshiko, **LL Schmitz,** JA Smith, L Ferrucci, M Levine\*. (2020). Underlying features of epigenetic aging clocks in vivo and in vitro. *Aging Cell*, 19:e13229.
- 13. **Schmitz LL\***, AM Gard, EB Ware. (2019). Examining sex differences in pleiotropic effects for depression and smoking using polygenic and gene-region aggregation techniques. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, 180B: 448-468.
- 14. **Schmitz LL\***, C McCluney, MT Hicken, A Sonnega. (2019). Interpreting subjective and objective measures of job resources: The importance of sociodemographic context. *International Journal of Environmental Research and Public Health*, 16: 3058.
- 15. McCluney C<sup>±\*</sup>, **LL Schmitz**<sup>±</sup>, MT Hicken, A Sonnega. (2018). Structural racism in the workplace: Does perception matter for health inequalities? *Social Science and Medicine*, 199: 106-114.
- 16. **Schmitz LL\*** and D Conley. (2017). The effect of Vietnam-Era conscription and genetic potential for educational attainment on schooling outcomes. *Economics of Education Review*, 61: 85-97. NBER Working Paper #22393.
- 17. **Schmitz LL\*** and D Conley. (2017). Modeling gene-environment interactions with quasi-natural experiments. *Journal of Personality*, 85(1): 10-21.
- 18. **Schmitz LL\***. (2016). Do working conditions at older ages shape the health gradient? *Journal of Health Economics*, *50*: 183-197.
- 19. **Schmitz LL** and D Conley\*. (2015). The long-term effects of Vietnam-Era conscription and genotype on smoking behavior and health. *Behavior Genetics*, 46(1): 43-58. NBER Working Paper #21348.

## **Book Chapters and Reviews**

- 20. **Schmitz LL.** (2018). Review of *Closing the Deficit: How Much Will Later Retirement Help?* Edited by Gary Burtless and Henry J. Aaron. *Eastern Economic Journal*, 44(2): 332-334. 10.1057/eej.2014.55
- 21. **Schmitz LL.** (2013). Do cultural tax districts buttress revenue growth for arts organizations? In M. Rushton, ed., *Creative Communities: Art Works in Economic Development*. Washington: Brookings Institution Press, pp. 80-96.

22. Milberg W. and **Schmitz LL.** (2011). The business of macro imbalances: Gluts in savings, money and profits. In P. Arestis, ed., *Microeconomics, Macroeconomics and Economic Policy: Essays in Honour of Malcolm Sawyer*. London: Palgrave, pp. 72-95.

## **Policy Publications**

- 23. **Schmitz LL\***, McCluney C, Hicken MT, Sonnega A. (2019). Policy Levers May Improve Older Workers' Perceptions of their Psychosocial Work Environment. *Generations*, 43(3): 78-85.
- 24. Saad-Lessler J, Ghilarducci T, **Schmitz LL**. (2012). Are New Yorkers ready for retirement? Trends in plan sponsorship, participation, and preparedness. NY: New York City Comptroller's Office Budget and Policy Bureau.
- 25. Ghilarducci T, Hiltonsmith R, **Schmitz LL.** (2012). State guaranteed retirement accounts: A low cost, secure solution to America's retirement crisis. NY: Demos.
- 26. Allegretto SA, Rhee N, Saad-Lessler J, **Schmitz LL.** (2011). California workers' retirement prospects. In Nari Rhee, ed., *Meeting California's Retirement Security Challenge*. Berkeley, CA: UC Berkeley Center for Labor Research and Education, pp. 21-41.

## **Online Data Documentation Reports**

- 27. Ware EB, **Schmitz LL**, Gard, AM, Faul J. (2018). Health and Retirement Study polygenic scores documentation report. Release 2: 2006-2012 Genetic Data.
- 28. Ware EB, **Schmitz LL**, Faul J. (2018). Health and Retirement Study polygenic scores documentation report. Release 1: 2006-2010 Genetic Data.

### RESEARCH AND PUBLICATIONS IN PROGRESS

\*Denotes corresponding author; \*denotes equal contribution; \*denotes mentored student/postdoc

## **Papers Under Review**

- Vasiljevic E\*\*, **LL Schmitz**, CD Engelman. Prenatal nutritional environment is associated with latelife cognition in the Health and Retirement Study: A natural experiment.
- Basu, S\*\*, J Fletcher, and **LL Schmitz**. Later-life impacts of delaying childbirth on maternal health and economic wellbeing in the UK Biobank. Submitted.
- Beauchamp J\*, J Lee, M McGue, and **LL Schmitz**. Nature-nurture interplay: Evidence from molecular genetic and pedigree data in Korean American adoptees. Submitted.
- Cheng M, D Conley, TB Kuipers, C Li, CP Ryan, MJ Taeubert, S Wang, T Wang, J Zhou, **LL Schmitz**, EW Tobi, BT Heijmans, LH Lumey, DW Belsky\*. Accelerated biological aging six decades after prenatal famine exposure. Submitted.
- Miao J<sup>#</sup>, G Song, Y Wu, J Hu, Y Wu, S Basu<sup>#</sup>, JS Andrews, K Schaumberg, JM Fletcher, **LL Schmitz**, Q Lu\*. Reimagining Gene-Environment Interaction Analysis for Human Complex Traits. Submitted.

## **Working Papers**

- Gawai V<sup>#</sup>, V Duque, J Lee, **LL Schmitz\***. The Green Revolution and aging in India.
- Alemu R<sup>#</sup> and **LL Schmitz**\*. The impact of polygenic risk and cigarette taxation across the life course on smoking behavior.
- S Basu<sup>#</sup>, J Fletcher, Q Lu, J Miao<sup>#</sup>, **Schmitz LL**\*. Understanding the role of genetic heterogeneity in smoking interventions: Experimental evidence from the Lung Health Study.
- **Schmitz LL**, J Goodwin<sup>#</sup>, D Conley, T Johnson\*. Do public policies shape the control people feel over their lives? Assessing the boundary case of the Vietnam draft lotteries.
- Harrati A<sup>±</sup> and **LL Schmitz**<sup>±</sup>. The interaction of health, genetics, and occupational demands in SSDI determinations. NBER-RDRC working paper.
  - Profiled by NBER and the Center for Retirement Research
- **Schmitz LL\*** and D Weir. Genetic and environmental influences on schooling and lifetime earnings: Evidence from the U.S. High School Movement.
- Ware EB\*, **LL Schmitz**, J Faul, JA Smith, C Mitchell, W Zhao, D Weir, and SLR Kardia. Heterogeneity in polygenic scores for common human traits. <u>bioRxiv preprint</u>.

## **In Preparation**

- **Schmitz LL**, I Kohler, J MacIsaac, J Mwera, B Kumwenda, V Mwapasa, KGH Katundu, M Kobor, HP Kohler. Assessment of dried blood spots for DNA methylation profiling and epigenetic aging biomarkers in the Malawi Longitudinal Study of Families and Health.
- Venechuk G<sup>#</sup> and **LL Schmitz\***. The effect of state-level recession intensity on accelerated epigenetic aging: Evidence from the 2008-2010 Great Recession.
- **Schmitz LL\***, W Zhao, SM Ratliff, JA Smith. An epigenetic biomarker of socioeconomic status is predictive of future morbidity and mortality.
- Basu S\*\* J Fletcher, **LL Schmitz**. Association between fertility decisions and epigenetic clocks of aging: Evidence from the Health and Retirement Study.
- **Schmitz LL\***, R Alemu<sup>#</sup>, P Turley, D Cesarini, and D Benjamin. Effects of cigarette taxation on smoking-related DNA methylation patterns.
- Bruns A\*, **LL Schmitz**, MT Hicken. Racial inequalities in poor birth outcomes: Clarifying the role of precarious work.

#### RESEARCH SUPPORT

Underlined dollar amounts are direct costs.

## **Current Research Support**

1. R01 AG079527 Kohler & Schmitz (MPI) 2023-2027

NIA/NIH

\$7,991,189
Adversity, Aging, and ADRD Risk among the Global Poor: A Biosocial Lifecourse Approach

2. Vilas Associate Award Schmitz (PI) 2022-2024
University of Wisconsin-Madison \$95,584
Leveraging Cigarette Tax Policies to Identify the Causal Effect of Smoking on Epigenetic Signatures

3. R00 AG056599 Schmitz (PI) 2019-2024
NIA/NIH \$488,373
Life Course Determinants of Epigenetic Age Acceleration and Subsequent Dementia

## **Completed Research Support**

- 4. **Pilot Grant [P30 AG017266]** Schmitz (PI) 2022-2023
  UW-Madison Center for Demography of Health and Aging (CDHA)/NIA \$38,939
  Assessing Measures of Biological Age in a Low-Income Context: The Malawi Longitudinal Study of Families and Health
- 5. **Pilot Grant [P30 AG017266] Duque & Schmitz (MPI)** 2021-2022 UW-Madison Center for Demography of Health and Aging (CDHA)/NIA \$35,000 Cardiometabolic Risk, Cognitive Aging, and the Life Course: Evidence from the Longitudinal Aging Study in India (LASI)
- 6. Pilot Grant [P30 AG017265] Schmitz (PI) 2021-2022
  USC/UCLA Center on Biodemography and Population Health/NIA
  Early Life Adversity Associations with Later Life Epigenetic Profiles
- 7. Sandell Grant [BC20-S2] Duque & Schmitz (MPI) 2020-2021
  Center for Retirement Research/Social Security Administration \$45,000
  The Influence of Early-life Economic Shocks on Long-term Outcomes: Evidence from the U.S. Great Depression
- 8. **Pilot Grant [U24 AG058556]** Schmitz & Ware (MPI) 2020-2021

  NIA Research Centers Collaborative Network (RCCN) \$62,400

  Examining Sex differences in Pleiotropic Effects for Depression and Cognition Using Polygenic and Gene-region Aggregation Techniques
- 9. NBER RDRC [NB20-11] Harrati & Schmitz (MPI) 2019-2020
  National Bureau for Economic Research (NBER) \$31,582
  Retirement and Disability Research Consortium (RDRC)
  The Interaction of Health, Genetics, and Occupational Demands in DI Determinations
- 10. March of Dimes Bruns, Hicken, Schmitz (MPI) 2018-2019
  Center for Social Science Research
  Racial Inequalities in Poor Birth Outcomes: Clarifying the Role of Precarious Work
- 11. **K99 AG056599** Schmitz (PI) 2017-2019 NIA/NIH \$245,000

Life Course Determinants of Epigenetic Age Acceleration and Subsequent Dementia

- 12. **Pilot Grant [P30 AG012846]** Schmitz & Ware (MPI) 2016-2017
  University of Michigan Center on the Demography of Aging/NIA \$30,400
  Demographic and Socioeconomic Differences in Polygenic Risk of Cardiovascular Health
- 13. Russell Sage Foundation Conley (PI) 2015-2017
  Gene-Environment Interactions and Health Inequality over the Life \$\)
  Course. Role: Co-Investigator. \$\)
  \$\)
- 14. **Dissertation Fellowship** Schmitz (PI) 2014-2015
  Center for Retirement Research/Social Security Administration
  The Impact of Working Conditions on the Health of an Aging Workforce
- 15. **Doctoral Dissertation Improvement Grant** Schmitz (PI) 2014-2015
  National Science Foundation \$7,920
  The Impact of Working Conditions on the Health of an Aging Workforce

## FELLOWSHIPS, AWARDS, AND HONORS

2022-24	Vilas Associate Award, UW-Madison
2018	Marshall Weinberg Endowment Fund Awardee, Population Studies Center,
	University of Michigan
2017	Awarded K99/R00 Pathway to Independence Award, NIH/NIA
2017	Butler-Williams Scholar, NIH/NIA
2017	A. Regula Herzog Young Investigators Award, Survey Research Center, University of Michigan
2015	Edith Henry Johnson Award for Outstanding Dissertation Research, New School
2013	Dissertation Fellowship, New School for Social Research
2011-15	Dean's Fellowship, New School for Social Research
2010-13	Bernard Schwartz Research Assistantship, New School for Social Research
2010, 2014	Graduate Student Research Travel Award, New School

### **PRESENTATIONS**

### **Invited Talks and Presentations**

- 1. *Title TBD*. Invited talk at O'Neill School of Public and Environmental Affairs, **Indiana University**. (April 4, 2024).
- 2. *Title TBD*. Invited talk at Office of Population Research, **Princeton University**. (February 13, 2024).

- 3. In Utero Exposure to the Great Depression is Reflected in Late-Life Epigenetic Aging Signatures. Invited Talk at the **NIH Behavioral and Social Sciences Research (BSSR) Festival**. Virtual. (December 5, 2023).
- 4. Leveraging Epigenetic Data to Examine Lifecourse Disparities in Aging. Invited talk at Center for Social Data Analytics, **The Pennsylvania State University**. (September 15, 2023).
- 5. Epigenetics and the Economics of Aging. Invited talk at the **National Bureau for Economic Research (NBER) Summer Institute on Aging,** Cambridge, MA. (July 25, 2023).
- 6. Genome-wide Measures of Genetic Risk Reveal Treatment Effect Heterogeneity In A Randomized Control Trial of Smoking Cessation. Invited presentation at the Virtual Seminar on the Economics of Risky Health Behaviors (VERB). (October 17, 2022).
- 7. In Utero Exposure to the Great Depression is Reflected in Late-Life Epigenetic Aging Signatures. Invited presentation at the Center for Demography and Ecology (CDE) 60<sup>th</sup> Anniversary Celebration, University of Wisconsin-Madison. (October 8, 2022).
- 8. Leveraging the Genome to Evaluate the Impact of the Social Environment. Invited talk at the Institute for Research on Poverty (IRP), University of Wisconsin-Madison. (April 21, 2022).
- 9. *An Economist's View of Biological Age*. Invited presentation at Measuring Biological Age workshop, **Research Centers Collaborative Network (RCCN) of the NIA, NIH**. Online due to COVID-19. (January 19-20, 2022).
- 10. Leveraging the Genome to Evaluate the Impact of the Social Environment. Invited talk at Population Studies Center, **University of Pennsylvania**. (November 15, 2021).
- 11. In Utero Exposures and Epigenetic Aging Signatures: Evidence from the U.S. Great Depression. Invited presentation at the Center for Economic and Social Research, University of Southern California. Online due to COVID-19. (October 11, 2021).
- 12. *The Intersection of Human Genetics and Public Policy*. Invited interview on the **1050 Bascom Podcast**, Department of Political Science, **University of Wisconsin-Madison**. (April 2021).
- 13. Integrating Epigenomic Data into Population Research to Illuminate Social Pathways of Aging. Invited talk at Advances in New Data and Big Data for Aging Research, co-sponsored by **NIA-funded Centers for Population Research**. Online due to COVID-19. (February 12, 2021).
- 14. The Impact of Early-life Shocks on Long-term Outcomes: Evidence from the U.S. Great Depression. Invited presentation in the Population Health Sciences Department's Monday Seminar Series, University of Wisconsin-Madison (October 12, 2020).
- 15. Leveraging the Genome to Evaluate the Impact of the Social Environment. Invited talk at the Holtz Center for Science and Technology Studies (STS) Lunch Seminar, University of Wisconsin-Madison. (October 1, 2020).

- 16. Leveraging the Genome to Evaluate the Impact of the Social Environment. Invited talk at the Center for Demography and Ecology (CDE) Demography Seminar, University of Wisconsin-Madison. (September 15, 2020).
- 17. The Interaction of Health, Genetics, and Occupational Demands in SSDI Determinations. Invited presentation at the annual **Retirement and Disability Research Consortium (RDRC)**Meeting. Online due to COVID-19. (August 6, 2020).
- 18. The Influence of Early-Life Economic Shocks on Long-Term Outcomes: Evidence from the U.S. Great Depression. Invited presentation at the National Bureau for Economic Research (NBER) Summer Institute on Aging, Cambridge, MA. (July 22, 2019).
- 19. Using Gene-Environment Interactions to Interrogate the Impact of the Social Environment on Smoking Behavior. Invited presentation at The World Writes on the Body: How the Environment Impacts the Phenotype. International symposium hosted by Columbia University and the University of Toronto, Florence, Italy. (May 25, 2018).
- 20. Leveraging Gene-Environment Interactions to Evaluate the Impact of the Social Environment. Invited talk at the Institute for Social Research (ISR), University of Michigan. (May 15, 2018).
- 21. Incorporating Polygenic Scores into Research on Aging. Invited presentation at the Michigan Center on the Demography of Aging, University of Michigan. (May 2018).
- 22. Genetic and Environmental Influences on Schooling and Lifetime Earnings. Invited presentation at the National Bureau for Economic Research (NBER) Summer Institute on Aging, Cambridge, MA. (July 24, 2017).
- 23. The Effect of Vietnam-Era Conscription and Genetic Potential for Educational Attainment on Schooling Outcomes. Invited presentation at Polygenic Prediction and its Application to Social Science, University of Southern California. (April 14, 2017).
- 24. The Effect of Vietnam-Era Conscription and Genetic Potential for Educational Attainment on Schooling Outcomes. Invited presentation at the National Bureau for Economic Research (NBER) Economics of Education Meeting, Stanford University. (November 10, 2016).
- 25. Do Working Conditions at Older Ages Shape the Health Gradient? Invited presentation at the annual **Retirement and Disability Research Consortium (RDRC) Meeting**, National Press Club, Washington, DC. (August 6, 2015).
- 26. Do Cultural Tax Districts Buttress Revenue Growth for Arts Organizations?
  Invited presentation at The Arts, New Growth Theory, and Economic Development research symposium, **Brookings Institute**, Washington, DC. (May 10, 2012).

## **Conference Presentations**

27. Causal Effects of Early-Life Adversity on the Pace of Biological Aging. Paper presentation at the Gerontological Society of America Annual Scientific Meeting, Tampa, FL. (November 9, 2023).

- 28. Genome-wide Measures of Genetic Risk Reveal Treatment Effect Heterogeneity in a Randomized Control Trial of Smoking Cessation. Paper presented at Frontiers in Economic Analysis with Genetic Data, University of Chicago. (March 11, 2023).
- 29. In Utero Exposure to the Great Depression is Reflected in Late-Life Epigenetic Aging Signatures. Paper presented at Institute for Research on Poverty (IRP) Summer Research Workshop, University of Wisconsin-Madison. (June 14, 2022).
- 30. In Utero Exposure to the Great Depression is Reflected in Late-Life Epigenetic Aging Signatures. Paper presented at the annual meeting of the **Population Association of America** (**PAA**). Online due to Covid-19. (April 8, 2022).
- 31. Promises and Pitfalls of Integrating Epigenetic Data into Economic Research. Paper presented at Frontiers in Economic Analysis with Genetic Data, University of Wisconsin-Madison. (November 18-19, 2021).
- 32. Methods for Improving the Detection and Utility of G x E interactions in Population Data. Paper presented at New Opportunities for Research Funding Agency Cooperation in Europe (NORFACE) Conference on Gene-Environment Interactions. Online due to Covid-19. (November 5, 2020).
- 33. Methods for Improving the Detection and Clinical Utility of Polygenic Risk Score (PRS)-by-Environment Interactions in Population Data. Society for Research on Nicotine and Tobacco Annual Meeting, New Orleans, LA. Canceled due to Covid-19.
- 34. How the Vietnam Draft Lottery Design Shed Light on the Role Gene-Environment Interactions Play in Determining Life Chances. Paper presented at the American Association for the Advancement of Science (AAAS) Meeting, Seattle, WA. (February, 2020).
- 35. Examining Sex Differences in the Association Between Genetic Risk for Depressive Symptoms and Smoking Behavior. Paper presented at the **NIA Biomarker Network Meeting**, **Population Association of America (PAA)**, Austin, TX. (April 10, 2019).
- 36. Genetic and Environmental Influences on Schooling and Lifetime Earnings. Paper presented in **Department of Human Genetics Seminar Series**, **University of Michigan**. (November 11, 2018).
- 37. The Influence of Early-life Economic Shocks and Genetic Diversity on Long-term Economic Outcomes. Paper presented at **Integrating Genetics and the Social Sciences**, University of Colorado-Boulder. (October 11-12, 2018).
- 38. The Influence of Early-life Economic Shocks and Genetic Diversity on Long-term Economic Outcomes. Paper presented at the annual meeting of the American Society of Health Economists, Atlanta, GA. (June 10-13, 2018).
- 39. Genetic and Environmental Influences on Schooling and Lifetime Earnings.

  Paper presented at the annual meeting of the **Population Association of America (PAA)**,

  Denver, CO. (April 26-28, 2018).

- 40. The Impact of Cigarette Taxation and Polygenic Risk for Smoking on Smoking Behavior in the 20<sup>th</sup> and 21<sup>st</sup> Century. Paper presented at **Integrating Genetics and the Social Sciences**, University of Colorado-Boulder. (October 19-20, 2017).
- 41. Polygenic Risk for Smoking and Depression Contribute to Sex Differences in Smoking Initiation. Paper presented at the annual meeting of the **Population Association of America (PAA)**, Chicago, IL. (April 27-29, 2017).
- 42. Genetic and Environmental Influences on Schooling and Lifetime Earnings
  Paper presented at Allied Social Sciences Association (ASSA) Annual Meeting, American
  Economic Association panel, Chicago, IL. (January 6-8, 2017).
- 43. The Impact of Late-Career Job Loss and Genotype on Body Mass Index.

  Poster presented at the annual meeting of the **Population Association of America (PAA)**,
  Washington, DC. (March 31-April 2, 2016).
- 44. Social and Genetic Contributions to Gender-Cohort Differences in Smoking Behavior. Paper presented at **Integrating Genetics and the Social Sciences**, University of Colorado-Boulder. (October 21-22, 2016).
- 45. Do Working Conditions at Older Ages Shape the Health Gradient? Paper presented at Allied Social Sciences Association (ASSA) Annual Meeting, Labor Employment Relations Association (LERA) panel, Boston, MA. (January 3-5, 2015).
- 46. The Impact of Late-Career Job Loss and Genotype on Body Mass Index. Paper presented at Integrating Genetics and the Social Sciences, University of Colorado-Boulder. (October 22-23, 2015).
- 47. Does Job Quality Have Long-term Consequences for the Health of Older Workers? Paper presented at **Allied Social Sciences Association (ASSA) Annual Meeting**, Labor Employment Relations Association (LERA) panel, Philadelphia, PA. (January 3-5, 2014).
- 48. The Effects of Vietnam-Era Military Service and Genotype on Labor Force Participation at Older Ages. Paper presented at Integrating Genetics and the Social Sciences Conference (IGSS), University of Colorado-Boulder. (October 9-10, 2014).
- 49. *Does Cultural Taxation Crowd-Out Private Funding for the Arts?* Paper presented at the **International Conference on Cultural Economics**, Copenhagen, Denmark. (June 10-12, 2010).

#### **TEACHING**

## **Principal Areas**

Social genomics, public program evaluation, impact evaluation, causal inference, population health and health disparities, health economics, health policy

## **Courses Taught**

**PA 871: Public Program Evaluation.** La Follette School of Public Affairs, University of Wisconsin-Madison. Fall 2022 (in person).

**PA 281: Discovering What Works in Health Policy.** La Follette School of Public Affairs, University of Wisconsin-Madison. Spring 2022 (in person), Spring 2023 (in person).

**PA 523: Policy, Privacy, and Personal Identity in the Postgenomics Era.** La Follette School of Public Affairs, University of Wisconsin-Madison. Fall 2019 (in person), Spring 2021 (online).

**PA 799: Independent Study in Epigenetics and Public Policy.** La Follette School of Public Affairs, University of Wisconsin-Madison, Spring 2023 (in person).

## **Guest Lectures**

Genetics 375: Eugenics Past and Present. The Nature-Nurture Debate and Why it Matters for Public Policy. University of Wisconsin-Madison. (Spring 2023).

**Population Health 636: Public Health Genomics.** The Nature-Nurture Debate and Why it Matters for Public Policy. University of Wisconsin-Madison. (Spring 2021).

**Sociology 901: Biodemography.** Topics in Social Epigenomics. University of Wisconsin-Madison. (Spring 2021).

Scientific Accountability Group, Department of Genetics. Genetics and Education. University of Wisconsin-Madison. (Spring 2021).

**BMI 826: Biostatistics.** Gene-Environment Interactions. University of Wisconsin-Madison. (Spring 2020).

**PA 200:** Contemporary Public Policy Issues. Privacy Issues Related to Medical Records and Consumer Genetic Testing Companies. (Spring 2020).

## **Other Teaching Activities and Experience**

Madison Teaching and Learning Excellence (MTLE) early-career faculty development teaching fellowship program. University of Wisconsin-Madison. (Spring 2021, Fall 2021).

Instructor: Russell Sage Foundation Summer Institute in Social Science Genomics. Epigenetics and Social Science. (Summer 2019, Summer 2021).

**Teaching Assistant: Advanced Econometrics I (PhD core course).** Department of Economics, New School for Social Research. (Spring 2013).

## **Advising**

### **Postdoctoral Trainees**

2021-23 Shubhashrita Basu, Ph.D. (Economics)

### **Research Assistants**

2020-	Vikas Gawai, Ph.D. candidate in Applied Economics
2020-	Jiacheng Miao, Ph.D. candidate in Biostatistics and Medical Informatics
2022-23	Annemarie Schweinert, Ph.D. student in Economics

2022-23	Lauren Rhodes, MPA student in Public Affairs
2020-22	Jerome Choi, Ph.D. student in Population Health
2020-22	Liz Duffie, MPA student in Public Affairs
2019-22	Robel Alemu, Ph.D. student in Economics (Tufts University)
2019-21	Julia Goodwin, Ph.D. student in Sociology

## **Additional Research Advising**

2021- Grace Venechuk, Ph.D. student in Sociology

#### **Doctoral Dissertation Committees**

2023 Yuexuan Xu, Ph.D. candidate in Epidemiology

Identification of Life Course Gene-Environment Interactions in Cognitive Decline During the Preclinical Stage of Alzheimer's Disease

Role: Committee member

Julia Goodwin, Ph.D. in Sociology, UW-Madison
 Considering Measurement Bias in Cognition at the Intersection of Race and Gender
 Role: Committee member

- 2023 Jiacheng Miao, Ph.D. candidate in Biostatistics and Medical Informatics, UW-Madison Statistical Methods of Gene-Environment Interaction Analysis for Human Complex Traits Role: Co-Advisor
- 2022 Robel Alemu, Ph.D. in Economics, Tufts University

  Essays on the Impacts of Modifiable Risk Exposures on Physical Health and Cognitive
  Performance
  Role: Committee member
- 2022 Jie Song, Ph.D. in Biostatistics and Medical Informatics, UW-Madison Statistical Methods for Polygenic Modeling and Genetic Prediction in Large Biobanks Role: Committee member
- Vikas Gawai, Ph.D. candidate in Applied Economics, UW-Madison
   Essays on Technology, Health, and Aging
   Role: Committee member

# **Preliminary Examinations**

2022 Jerome Choi, Ph.D. student in School of Medicine and Public Health Preliminary Examination A in Epidemiology Role: Committee Member

2020 Quanfa He, Ph.D. student in Psychology, UW-Madison Examining Polygenic Resilience in ADHD Depression (1<sup>st</sup> year proposal) Role: Committee Member

### **SERVICE**

### **University of Wisconsin-Madison**

2023-2024	Member, Diversity, Equity, and Inclusion (DEI) Committee, La Follette School of Public Affairs
2023	Member, Tenure-Track Search Committee, Social Genomics Cluster, Department of Biostatistics and Medical Informatics
2022-2023	Faculty-Student Diversity, Equity, and Inclusion (DEI) Liaison, La Follette School of Public Affairs
2022	Teaching peer review, PA 974 Politics of State Issues, La Follette School of Public Affairs
2021-present	Neuroscience-La Follette School Joint Degree Steering Committee
2019-present	Neuroscience and Public Policy (N&PP) Program Admissions Committee, Department of Neuroscience and La Follette School of Public Affairs
2019-2020	Member, Tenure-Track Search Committee, Social Genomics Cluster, La Follette School of Public Affairs and Department of Sociology
2019-2022	Senator, Faculty Senate (Fall 2019, Spring 2020, Spring 2022)
2019	Invited guest speaker at "Women in Economics" meeting organized by undergraduate students, Department of Economics. (November 1).
<b>Professional</b>	
2023	Conference co-organizer and session chair, The Advances in Social Genomics Research Conference, University of Wisconsin-Madison. (June 8-9).
2023	Conference co-organizer, Frontiers in Economic Analysis with Genetic Data, University of Chicago. (March 10-11).
2021-2023	American Association for the Advancement of Science (AAAS), Population Association of America representative (3-year term).
2021	Conference co-organizer, Frontiers in Economic Analysis with Genetic Data, University of Wisconsin-Madison. (November 18-19).
2021	Speaker on "Rising Women" Panel, National Conference for Women in Economics. (April 11).
2020	Speaker on "Applying for NIH Early Career Awards" Panel, Interdisciplinary Association for Population Health Science (IAPHS). (October 28).
2019	Speaker on "Genetics, Privacy, and Policy" Panel, National Science Policy Symposium, University of Wisconsin-Madison. (November 2).
2019	Discussant at Population Association of America Annual Meeting, Austin, TX. (April 10).
2018	Discussant at Population Association of America Annual Meeting, Denver, CO. (April 9).
2017	Session organizer for "Integrating Genetic Data into Economic Research" American Economic Association (AEA) Panel, Allied Social Sciences Association (ASSA) Annual Meeting, Chicago, IL. (January 6).
2017	Discussant at Retirement and Disability Research Consortium (RDRC) Meeting, National Press Club, Washington, DC. (August 3).

# **Grant Review**

- 2024 National Institute on Aging (NIA), National Institutes of Health (NIH)
- 2023 Advanced Laureate Awards Programme (IRCLA) reviewer, Irish Research Council
- 2022 Proposal reviewer, National Science Foundation

## **Ad-Hoc Reviewer**

PNAS, PNAS Nexus, Nature Communications, Journal of Health Economics, European Economic Review, American Journal of Health Economics, Molecular Psychiatry, Nature Climate Change, PLoS One, Behavior Genetics, International Journal of Environmental Research and Public Health.

## **Professional memberships**

National Academy of Social Insurance (NASI) (invited member), American Economic Association (AEA), American Society of Health Economists (ASHEcon), Population Association of America (PAA), Gerontological Society of America (GSA)